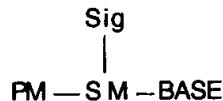


Filed: June 7, 1995

Page 4 (Preliminary Amendment - September 11, 1995)

-- 238. (New) An oligo- or polynucleotide comprising at least one nucleotide having the formula,



wherein PM is a phosphate moiety, SM is a ribose or a deoxyribose sugar moiety, and BASE is a pyrimidine, purine or 7-deazapurine moiety, said PM being attached to SM at a position independently selected from the 2', 3', and 5' positions of SM when said nucleotide is a ribonucleotide, and at a position independently selected from the 3' and 5' positions when said nucleotide is a deoxyribonucleotide, said BASE being attached to the 1' position of SM from the N<sup>1</sup> position when BASE is a pyrimidine or the N<sup>9</sup> position when BASE is a purine or 7-deazapurine, and said Sig is a detectable moiety covalently attached to SM directly or through a linkage group. --

-- 239. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig is attached to the C2' or the C3' position of SM. --

-- 240. (New) An oligo- or polydeoxyribonucleotide in accordance with claim 238 wherein said nucleotide comprises a deoxyribonucleotide. --

-- 241. (New) An oligo- or polyribonucleotide in accordance with claim 238 wherein said nucleotide comprises a ribonucleotide. --

-- 242. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig comprises a moiety containing at least 3 carbon atoms. --

-- 243. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig is selected from the group consisting of monosaccharides, oligosaccharides and polysaccharides. --

-- 244. (New) The oligo- or polynucleotide in accordance with claim 243 wherein Sig is selected from the group consisting of triose, tetrose, pentose, hexose, heptose and octose. --

-- 245. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig includes a glycosidic linkage moiety. --

-- 246. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig comprises a sugar residue and said sugar residue is complexed with a binding protein therefor. --

-- 247. (New) The oligo- or polynucleotide in accordance with claim 246 wherein said binding protein comprises a lectin. --

-- 248. (New) The oligo- or polynucleotide in accordance with claim 247 wherein said lectin comprises Concanavalin A. --

*E5*  
-- 249. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig comprises a component selected from the group consisting of biotin, iminobiotin, an electron dense component, a magnetic component, an enzyme, a hormone component, a radioactive component, a metal-containing component, a fluorescent component, a chemiluminescent component, an antigen, a hapten and an antibody component. --

-- 250. (New) The oligo- or polynucleotide in accordance with claim 249 wherein said electron dense component comprises ferritin. --

-- 251. (New) The oligo- or polynucleotide in accordance with claim 247 wherein said lectin is conjugated to ferritin. --

-- 252. (New) The oligo- or polynucleotide in accordance with claim 248 wherein said Concanavalin A is conjugated to ferritin. --

-- 253. (New) The oligo- or polynucleotide in accordance with claim 249 wherein Sig comprises a radioactive isotope. --

-- 254. (New) The oligo- or polynucleotide in accordance with claim 253 wherein said radioactive isotope comprises radioactive cobalt. --

-- 255. (New) The oligo- or polynucleotide in accordance with claim 249 wherein Sig comprises an enzyme. --

-- 256. (New) The oligo- or polynucleotide in accordance with claim 255 wherein said enzyme is selected from the group consisting of alkaline phosphatase, acid phosphatase,  $\beta$ -galactosidase, ribonuclease, glucose oxidase and peroxidase. --

-- 257. (New) The oligo- or polynucleotide in accordance with claim 249 wherein Sig comprises a fluorescent component. --

-- 258. (New) The oligo- or polynucleotide in accordance with claim 257 wherein said fluorescent component is selected from the group consisting of fluorescein, rhodamine and dansyl. --

-- 259. (New) The oligo- or polynucleotide in accordance with claim 249 wherein said Sig comprises a magnetic component. --

-- 260. (New) The oligo- or polynucleotide in accordance with claim 259 wherein such magnetic component comprises a magnetic oxide. --

-- 261. (New) The oligo- or polynucleotide in accordance with claim 260 wherein such magnetic oxide comprises ferric oxide. --

*ES*  
-- 262. (New) The oligo- or polynucleotide in accordance with claim 249 wherein Sig includes a hapten component capable of complexing with an antibody specific thereto. --

-- 263. (New) The oligo- or polynucleotide in accordance with claim 238 wherein Sig includes a catalytic metal-containing component. --

*S* *the*  
-- 264. (New) An oligo- or polynucleotide in accordance with claim 238 wherein said oligo- or polynucleotide is terminally ligated or attached to a polypeptide. --

-- 265. (New) A composition comprising an oligo- or polynucleotide which comprises at least one nucleotide in accordance with claim 238, a polypeptide capable of forming a complex with Sig, and a moiety which can be detected when such complex is formed. --

-- 266. (New) The composition in accordance with claim 265 wherein said polypeptide comprises a polylysine. --

-- 267. (New) The composition in accordance with claim 265 wherein said polypeptide comprises at least one member selected from the group consisting of avidin, streptavidin and anti-Sig immunoglobulin. --

-- 268. (New) The composition in accordance with claim 265 wherein Sig comprises a ligand and said polypeptide comprises an antibody thereto. --

-- 269. (New) A composition in accordance with claim 265 wherein said detectable moiety is selected from the group consisting of biotin, iminobiotin, an electron dense component, a magnetic component, an enzyme, a hormone component, a radioactive component, a metal-containing component, a fluorescent component, a chemiluminescent component, an antigen, a hapten and an antibody component. --

*f5*  
-- 270. (New) The oligo- or polydeoxyribonucleotide in accordance with claim 240 wherein said Sig comprises a moiety which is detectable when said nucleotide is incorporated with, contained in or associated with an oligo- or polynucleotide. --

*Dkt 52*  
-- 271. (New) The oligo- or polyribonucleotide in accordance with claim 241 wherein said Sig comprises a moiety which is detectable when said ribonucleotide is incorporated with, contained in or associated with an oligo- or polynucleotide. --

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In The Abstract of the Disclosure:

Replace the originally submitted Abstract with new page 141 attached hereto as Exhibit A.

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